

RESPONSE TO FINAL OFFICE ACTION
DATED OCTOBER 15, 2003

Appln. No. 09/869,006

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April 15, 2004

Amendments to the Specification

Please replace the paragraph on page 4, line 21, as follows:

The data measured by the sensors are sent through opportune interfaces to the data memorisation system that are able to re-elaborate the experimental information (total emission of electromagnetic waves of the object at various wave lengths and through various directions and/or distances), resolving integral equations with Fridgolm type methods, setting as output the three-dimensional map of the temperatures of the object as shown in Figure 2. Such a map in addition to being supplied as a table can be presented on a screen or also printed as a thermal image.

Please replace the paragraph on page 4, line 28, as follows:

The sensor battery (1) may be oriented on the basis of a program that the operator can elaborate during the analysis. For example, the operator, on the basis of the observations, at certain wavelengths representative of the surface thermal distribution, can determine topological parameters for the sensor movement operating at gradually growing wavelengths to better define the heat determinations of the deeper layers of the object. The output of the different frequency channels 2.1.....2n will be charged in command centre 3, that contains in its interior the elaboration unit 4 and co-ordination unit 5 of the entire instrument.